

### ABSTRACT OF THE DISCLOSURE

Presenilin Associated Membrane Protein (PAMP), and nucleic acids encoding this protein, are provided. PAMP and *PAMP* nucleic acids provide diagnostic and therapeutic tools for evaluating and treating or preventing neurodevelopmental and neuropsychiatric disorders. In a specific embodiment, mutations in PAMP are diagnostic for schizophrenia. The invention further relates to screening, particularly using high-throughput screens and transgenic animal models, for compounds that modulate the activity of PAMP and presenilins. Such compounds, or gene therapy with PAMP, can be used in treating neurodevelopmental and neuropsychiatric disorders, particularly schizophrenia. In addition, the invention provides PAMP mutants, nucleic acids encoding for PAMP mutants, and transgenic animals expressing PAMP mutants, which in a preferred aspect result in biochemical, morphological, or neuropsychological changes similar to those associated with schizophrenia.